CODEX ALIMENTARIUS COMMISSION E

Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda Item 4.1 **CX/CAC 21/44/3**

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION

Forty-fourth Session

WORK FROM THE CODEX COMMITTEE ON SPICES AND CULINARY HERBS (CCSCH) FOR ADOPTION OR APPROVAL BY THE COMMISSION

1. The Commission is invited to adopt the draft standards and related texts submitted for final adoption (Step 8 or Step 5/8) in accordance with the Procedures for the Elaboration of Codex Standards and Related Texts. The relevant texts from CCSCH are listed in **Part 1** of this document.

2. The Commission is also invited to adopt proposed draft standards and related texts submitted at Step 5 of the Uniform Procedure for the Elaboration of Codex Standards and Related Texts. The relevant texts from CCSCH are listed in **Part 2** of this document and, if adopted, will be advanced to Step 6 for further comments and consideration by CCSCH6.

3. Comments received regarding proposed draft standards and related texts from CCSCH and submitted in accordance with the Procedures for the Elaboration of Codex Standards and Related Texts are contained in CX/CAC 21/44/3 Add.1.

4. The Commission is furthermore invited to approve proposals to undertake new work or revise a standard, taking into account the critical review conducted by the Executive Committee, and to decide which subsidiary body or other body should undertake the work. The relevant proposals from CCSCH are listed in **Part 3** of this document, including the reference of the project document in the relevant report. The project documents are also compiled in this document for ease of reference and to ensure availability in all six languages. The Commission is invited to consider these proposals in the light of its *Strategic Plan 2020-2025* and the *Criteria for the Establishment of Work Priorities* and *Criteria for the Establishment of Subsidiary Bodies of the Codex Alimentarius Commission.*

5. The Commission is also invited to endorse relevant proposals from CCEXEC81 regarding extension of deadlines for completion of work.

Part 1 – Standards and related texts submitted for final adoption

Codex body	Standards and Related Texts	Reference	Job No.	Step
CCSCH	Draft standard for dried oregano	REP21/SCH Para. 36, Appendix II	N06-2014	8
	Draft standard for dried roots, rhizomes and bulbs — dried or dehydrated ginger	REP21/SCH Para. 65, Appendix III	N02-2017	8
	Draft standard for dried floral parts – dried cloves	REP21/SCH Para. 81, Appendix IV	N08-2017	8
	Draft standard for dried leaves - dried basil	REP21/SCH Para. 115, Appendix V	N05-2017	8

Part 2 – Standards and related texts submitted for adoption at Step 5

Codex body	Standards and Related Texts	Reference	Job No.
CCSCH	Draft standard for dried seeds - nutmeg[1]	REP21/SCH Para. 149, Appendix VI	N07-2017

Part 3 – Proposals to elaborate new standards and related texts

Codex Body	Text	Reference and project document
CCSCH	Proposal for new work on the development of a standard for small cardamom	• REP21/SCH, Appendix VII • Annex I of this document
CCSCH	Proposal for new work on the development of a standard for turmeric	• REP21/SCH, Appendix VIII • Annex II of this document
CCSCH	Proposal for new work on the development of a group standard for spices in the form of dried fruits and berries (All spice, Juniper berry, Star anise and Vanilla)	• REP21/SCH, Appendix IX • Annex III of this document

[1] CCSCH is requesting an extension of the deadline for completion of the work to CCSCH6

ANNEX I

PROPOSAL FOR NEW WORK ON CODEX STANDARD FOR SMALL CARDAMOM

(CCSCH Group category - Dried Fruits and Berries)

(For Approval)

INTRODUCTION

Small Cardamom, *Elettaria cardamomum* Maton, often referred as the "Queen of Spices", belongs to the family *Zingiberaceae*. It is popular for its very pleasant aroma and taste.

Apart from small cardamom there is one more variety called large cardamom, also known as black cardamom from the species *Amomum subulatum.* Cardamoms are recognized by their small seed pods: triangular in cross-section and spindle-shaped, with a thin, papery outer shell and small, black seeds. Small cardamom pods are small with light green colour whereas large cadamom pods are larger with dark brown colour. Both genera are native to the Indian subcontinent, Bhutan, Indonesia, and Nepal.

1. Purpose and scope of the standard

The scope of this work is to establish worldwide standard for small cardamom (*Elettaria cardamomum* Maton) in whole, seed and ground forms. The objective of this standard is to consider the identity and quality characteristics of small cardamom as whole capsule, seed and ground form during international trade.

2. Relevance and timeliness.

Due to the growing trend of worldwide cardamom production, exporting and trade, it is necessary to establish a commodity standard covering the quality, hygiene and labeling in order to have a reference that has been internationally agreed by consensus between the main producing and trading countries. The codex standard for cardamom will help to protect consumers' health and to promote fair trade practices in accordance with the different international agreements.

Cardamom is the world's third-most expensive spice, surpassed in price per weight only by saffron and vanilla. Economics of this valuable spice from different aspects such as marketing, employment, household's income, globalization and export, is important.

ISO has two specification standards for small cardamom.

- ISO 882-1: Cardamom (*Elettaria cardamomum Maton var. minuscula Burkill*) Specification, Part 1 – Whole Capsule.
- ISO 882-2: Cardamom (*Elettaria cardamomum Maton var. minuscula Burkill*) Specification, Part 2- Seeds.

3. Main aspects to be covered

The main aspects to be covered in the standard are the minimum quality required to ensure consumer health and to promote fair practices in international trade. Hence the standard will cover

i. Product Definition - Defining the product as "dry and/or dehydrated, whole capsule or seed of cardamom and including reference to the genus and the species and/or varietal types if necessary.

ii. Styles - Listing/describing the different forms of presentation including sizes of whole, or seeds of small cardamom.

iii. Classes/ Quality Criteria -Including provisions for moisture content, ash content, volatile oil content, Extraneous matter and classification of defectives vis-à-vis lot acceptance based on the defects allowed.

iv. Quality tolerances-Provisions for the labelling and marking of the product in accordance with the General Standard for the Labelling of Pre-packaged Foods

v. Provisions on contaminants that refer to the Codex General Standard for Contaminants and Toxins in Food and Feed.

vi. Hygiene provisions that refer to the Recommended International Code of Practice –General Principles of Food Hygiene.

vii. Provisions for pesticides residues, labelling and packaging with reference to pre-existing Codex documents.

viii. References to Methods of Analysis and Sampling.

4. Assessment against the Criteria for the Establishment of Work Priorities

General Criteria

There are different types of cardamom varieties. Developing a codex standard for small cardamom will supply high quality and safe products to protect consumer's health and will help improve fair trade.

(a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

By the early 21st century, Guatemala had become the largest producer of cardamom in the world, with an average annual yield between 25,000 and 29,000 tonnes. India, formerly the largest producer, since 2000 has been the second worldwide, generating around 15,000 tonnes annually.

Cardamom is one of the most important export products and plays significant role in income and employment of cardamom producers. Guatemala, India, Sri Lanka, Nepal, Indonesia and Tanzania are among main countries dealing with cardamom production.

Major importer countries of cardamom are Saudi Arabia, United Arab Emirates, Viet Nam, India, Bangladesh, Nepal, Jordan, Kuwait, Singapore, and Syrian Arab Republic.

Table 1:Top producing countries of Cardamom (Year 2016)

Country	Country's Rank/Share In Production (%)	Production Volume (Ton)	Growth in Production (1 Year) %	Country's Rank/Share In Export (%)	Export Value In 2016 (US $)
India	31.11	38,000	+72.7	8.67 (3)	24,022,803
Guatemala	29.04	35,475	+2.8	55.75 (1)	154,488,339
Indonesia	25.41	31,039	-9.5	2.59 (6)	7,168,770
Nepal	5.27	6,439	+24.6	12.38 (2)	34,317,328
Laos	2.55	3,115	+1.2	0.04 (34)	102,128
Bhutan	2.13	2,596	+24.2	0.18 (18)	495,144
Grenada	2.08	2,540	-18.0	-	-
Tanzania	0.63	764	-4.7	0.07 (27)	196,293
Sri Lanka	0.46	563	+2.0	2.12 (7)	5,883,903
Honduras	0.39	482	+0.6	1.08 (9)	2,995,598
Trinidad and Tobago	0.32	392	+7.1	-	-
Saint Vincent and the Grenadines	0.17	206	+7.3	-	-
Ethiopia	0.13	161	+5.2	0.02 (39)	67,741
Malawi	0.07	84	-6.7	0.00 (84)	906
Papua New Guinea	0.07	83	-3.5	0.02 (44)	46,737

Source: Tridge – Global Trade Platform

Table 2: Trade between Countries- Cardamoms, neither crushed nor ground (top 10 countries)

Pattern	Value exported in 2017 (USD thousand)	Trade balance in 2017 (USD thousand)	Quantity exported in 2017 (Tons)	Unit value USD/unit	Annual growth in value between 2013 - 2017 (%)	Annual growth in quantity between 2013-2017 (%)	Annual growth in value between 2016-2017 (%)	Share in world exports (%)
World	539,361	57,776	57,211	9,428	12	0	45	100
Guatemala	365,799	365,564	35,695	10,248	10	-3	60	67.8
India	73,980	35,334	4,698	15,747	20	14	14	13.7
Nepal	43,495	32,970	4,690	9,274	19	15	20	8.1
Indonesia	10,978	10,967	6,892	1,593	-4	-6	80	2
Singapore	10,854	-1,051	961	11,294	-4	-14	100	2
Sri Lanka	5,552	3,360	818	6,787	205	285	-3	1
Netherlands	5,105	-1,137	481	10,613	9	3	45	0.9
United Kingdom	3,410	-5,326	265	12,868	18	24	10	0.6
Bhutan	3,410	3,408	494	6,903	114	142	589	0.6
United Arab Emirates	2,926	-93,044	487	6,008	14	-2	-16	0.5

Sources: ITC calculations based on UN COMTRADE statistics. Unit: US Dollar thousand

Table 3: Trade between Countries - Cardamoms, neither crushed nor ground

Pattern	Value imported in 2017 (USD thousand)	Trade balance in 2017 (USD thousand)	Quantity imported in 2017 (Tons)	Unit value USD/unit	Annual growth in value between 2013-2017 (%)	Annual growth in quantity between 2013-2017 (%)	Annual growth in value between 2016-2017 (%)	Share in world exports (%)
World	481,585	57,776	47,889*	-	8	-2	41	100
Saudi Arabia	121,864	-120,107	8,135	14,980	-3	-9	37	25.3
United Arab Emirates	95,970	-93,044	9,226	10,402	8	-3	115	19.9

India	38,646	35,334	4,369	8,846	27	18	-13	8
Bangladesh	35,417	-35,410	3,737	9,477	28	13	95	7.4
Kuwait	14,914	-14,479	1,084	13,758	10	6	64	3.1
Pakistan	14,005	-13,993	0		22		2	2.9
Jordan	12,536	-10,398	1,348	9,300	17	-5	44	2.6
Singapore	11,905	-1,051	1,069	11,137	-1	-14	109	2.5
United States of America	10,655	-9,780	856	12,447	3	-1	17	2.2
Nepal	10,525	32,970	1,481	7,107	76	48	17	2.2
Egypt	10,205	-10,205	874	11,676	25	15	21	2.1
Viet Nam	9,949	-9,300	6,398	1,555	-5	-7	70	2.1

Table 3: Trade between Countries - Cardamoms, neither crushed nor ground (continued)

United Kingdom	8,736	-5,326	704	12,409	4	-1	38	1.8
Iraq	7,622	-7,622	703	10,842	709		-13	1.6
Syrian Arab Republic	6,935	-6,932	909	7,629	0	-17	26	1.4
Germany	6,254	-4,890	553	11,309	10	-3	46	1.3
Netherlands	6,242	-1,137	679	9,193	19	1	23	1.3
Japan	5,457	-5,457	382	14,285	1	-1	62	1.1
Qatar	5,414	-5,414	458	11,821	22	12	103	1.1

(b) Diversification of national legislations and apparent resultant or potential impediments to International trade:

1. Small cardamom is one of the most expensive spice in the world after saffron and vanilla. Trade of small cardamom plays a crucial role in the economy of export as well as importing countries.

2. Import and export take place between many countries. So, establishing international standard criteria based on codex standard is necessary for International trade and consumer support.

Cardamom is traded according to purity, quality specification and forms.

3. There are so many standards available nationally and internationally for small cardamom.

i. ISO 882-1: Cardamom (*Elettaria cardamomum Maton var. minuscula Burkill*) Specification, Part 1 – Whole Capsule.

ii. ISO 882-2 Cardamom (*Elettaria cardamomum Maton var. minuscula Burkill*) Specification, Part 2- Seeds.

iii. ISIRI 320-1: Cardamom [*Elettaria cardamomum* (Linnaeus) *Maton* var. *minuscula Burkill*] – Specification, Part 1: Whole Capsules

iv. ISIRI 320-2: Cardamom [*Elettaria cardamomum* (Linnaeus) *Maton* var. *minuscula Burkill*] – Specification, Part 2: Seeds

v. IS 1987:1984 -Cardamom (capsules and seeds) (Indian standard)

vi. European Spice Association Quality Minima Document

vii. ASTA cleanliness specifications for spices,seeds and herbs.

This would reduce possible barriers to trade and would provide a comprehensive framework setting out the minimum internationally acceptable requirements for Cardamom.

This new work will provide a recommendation, which countries could use to develop their own quality and grading standards for Cardamom and, when applied internationally, may assist in providing a harmonized approach.

Lack of harmonized and internationally accepted standard for small cardamom will lead to malpractices in the trade. In order to facilitate a fair trade, an internationally accepted codex standard is very essential.

Due to importance the quality control of small cardamom specifications, it is necessary to develop an international harmonized standard.

(c) International or regional market potential:

The quantity imported of cardamom in 2017 has been reported 47,889 tones and Annual growths in value of imported between 2016 and 2017 is 41%, which shows international demand for cardamom has been grown (ITC, Trade Map 2017). The major exporters are Guatemala, India, Indonesia, Sri Lanka, Nepal, and Tanzania. According to ITC data, the international trade accounted to more than 47,000 tones for about 481,585 US $ thousands in 2017.

Table 4: Exported value of cardamom, neither crushed nor ground (values in USD thousands)

Exporters	2013	2014	2015	2016	in 2017
World	317,143	399,539	447,605	392,219	539,339
Guatemala	217,208	240,319	242,474	229,008	365,799
India	32,142	58,007	70,405	65,157	73,980
Nepal	19,190	32,786	42,788	36,285	43,495
Indonesia	10,603	10,036	7,773	6,112	10,978
Singapore	9,531	10,066	11,894	5,425	10,854
Sri Lanka	114	194	954	5,699	5,552
Netherlands	3,771	2,709	2,513	3,524	5,105
Bhutan	68	609	12,423	495	3,410
United Kingdom	1,726	2,228	2,317	3,114	3,410
United Arab Emirates	11,609	21,005	33,349	17,203	2,910

Jordan	750	349	263	718	2,138
Saudi Arabia	1,155	1,866	3,558	2,664	1,757
Honduras	228	820	1,189	2,317	1,483
Guyana	0	0	0	0	1,391
Germany	1,278	1,013	1,058	1,146	1,364
United States of America	405	392	536	624	875
Viet Nam	841	250	200	69	650
France	467	438	289	382	495
Kuwait	195	219	57	432	435
Costa Rica	0	4	4	0	341
Canada	156	134	295	284	307
Oman	0	0	0	7	296
Sweden	201	145	284	281	254
Malaysia	140	78	178	1,732	249
Spain	181	99	165	158	239
Austria	14	39	47	218	221
Myanmar	2,110	13,132	9,913	7,429	184
Italy	128	88	76	79	133
Pitcairn					121
Guam				1	102

Table 5: Exported Quantity of cardamom, neither crushed nor ground

Exporters	Exported quantity, Tons				
	2013	2014	2015	2016	2017
World	55,976	62,901	59,587	56,905	57,178
Guatemala	38,812	38,989	33,327	35,645	35,695
Indonesia	6,698	7,737	6,246	4,034	6,892
India	2,621	4,230	5,308	4,829	4,698
Nepal	2,173	3,516	2,996	3,011	4,690
Singapore	1,487	1,425	1,638	736	961
Sri Lanka	12	5	116	767	818
Bhutan	5	53	484	38	494
Netherlands	469	352	318	444	481
United Arab Emirates	2,075	4,033	6,064	3,392	454
Honduras	184	218	433	676	370
United Kingdom	117	159	158	275	265
Saudi Arabia	110	326	426	420	249
Jordan	204	78	45	122	242
Myanmar	227	1,188	1,326	1,802	115
Germany	134	112	120	113	110
Guyana	0	0	0	0	107

Table 6: Imported value of cardamom, neither crushed nor ground (Top importers)

Importers	Imported value (in USD thousands)				
	2013	2014	2015	2016	2017
World	314,220	367,876	443,676	340,834	481,464
Saudi Arabia	126,660	114,286	122,364	88,644	121,864

United Arab Emirates	53,409	81,563	106,192	43,971	95,969
India	13,589	34,090	53,990	44,276	38,646
Bangladesh	16,377		35,713	20,144	35,417
Kuwait	9,181	9,313	10,140	9,092	14,914
Pakistan	6,309	9,349	11,124	13,724	14,005
Jordan	7,740	4,630	8,112	8,711	12,536
Singapore	9,674	10,037	11,566	5,709	11,905
United States of America	9,719	7,901	8,740	9,109	10,655
Nepal	649	8,106	2,376	9,023	10,525
Egypt	0	9,767	7,735	8,467	10,205
Viet Nam	702	230	76	98	9,949
United Kingdom	6,763	7,097	6,938	6,329	8,736
Iraq		0	1,787	8,884	7,622
Syrian Arab Republic	6,062	7,912	9,361	5,711	6,935
Germany	3,996	3,944	4,051	4,291	6,254
Netherland	3,090	3,511	3,235	5,095	6,242
Japan	4,791	3,759	4,007	3,361	5,457
Qatar	5,580	2,383	3,580	2,779	5,414
Canada	2,939	1,967	3,254	2,139	3,798
Iran,Islamic Republic of	1,022	625		5,644	3,652
Malaysia	1,669	1,487	2,615	3,721	3,520
Oman	2,456	2,238	2,345	1,889	3,121
Australia	1,301	1,169	1,445	1,444	2,457
Sri Lanka	323	252	479	2,787	2,192
Sudan			0	4,519	2,120
Myanmar	368	524	417	1,009	2,085

Free Zones	601	267	98	514	2,008
Lebanon	1,088	2,078	1,418	1,611	1,921
France	1,208	1,290	1,540	1,510	1,709

Table 7: Imported Quantity of cardamom, neither crushed nor ground

Importers	2013	2014	2015	2016	2017
	Imported quantity, Tons	Imported quantity, Tons	Imported quantity, Tons	Imported quantity, Tons	Imported quantity, Tons
World	39,515	50,261	51,203	46,133	47,889*
United Arab Emirates	6,750	10,872	12,802	5,937	9,226
Saudi Arabia	12,155	11,513	11,005	9,590	8,135
Viet Nam	59	28	9	13	6,398
India	1,845	4,626	4,485	4,399	4,369
Bangladesh	1,765		3,981	3,459	3,737
Nepal	177	1,959	428	1,390	1,481
Jordan	1,980	1,035	1,161	1,322	1,348
Kuwait	833	915	906	992	1,084
Singapore	1,600	1,598	1,491	795	1,069
Syrian Arab Republic	2,145	2,054	2,153	1,661	909
Egypt	0	1,312	915	925	874
United States of America	941	984	969	1,117	856
United Kingdom	698	671	629	592	704
Iraq		0	319	1,571	703
Netherlands	688	712	527	848	679
Germany	615	584	479	547	553
Qatar	546	297	429	400	458
Oman	441	592	544	396	428

Japan	360	365	339	296	382
Malaysia	309	282	341	383	349
Sri Lanka	27	40	59	305	322
Sudan			0	865	285
Canada	314	226	298	191	273
Guatemala	129	109	185	50	236
Turkey	17	20	149	193	229
Free Zones	141	51	10	60	218
Iran, Islamic Republic of	247	159		821	214
Myanmar	31	64	49	140	204

Table 8: Pattern of Export International Trade

Worldwide export data			
Year	Export quantity (in Metric Tons)	Value, US Dollar thousand	Growth rate In Value (%)
2013	55,976	317,907	-
2014	62,901	400,115	+25
2015	59,587	447,612	+12
2016	56,905	392,222	-14
2017	57,178	539,361	+37

Sources: ITC calculations based on UN COMTRADE and ITC statistics.

Table 9: Pattern of Import International Trade

Worldwide import data			
Year	import quantity (In Metric Tons)	Value, US Dollar thousand	Growth rate in Value (%)
2013	39,515	314,220	-
2014	50,261	367,876	+17
2015	51,203	443,676	+20
2016	46,133	340,834	-30
2017	*47,889	481,585	+14

Sources: ITC calculations based on UN COMTRADE and ITC statistics. *mirror data

Global demand for cardamom is expected to increase in future, mainly on account of increased culinary applications and functional foods. It can lead to increase cardamom trade. Due to the importance of the food safety, hygiene, quality control of cardamom specifications, it's necessary to develop an international harmonized standard.

(d) Amenability of commodity to standardization

The characteristics of cardamom its cultivation to retail sale e.g. cultivar varieties, composition, quality characteristics, processing, packaging, etc. all lead to adequate parameters for the standardization of the product. Taking into account that technical information is available and certain degree of harmonization at regional/international levels has already been achieved on certain aspects relevant to consumer's protection and trade facilitation as mentioned in point (b).

(e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no general commodity standard covering cardamom under Codex. The proposed standard will heighten consumer protection and facilitate cardamom trade by establishing an internationally agreed quality standard.

Since cardamom is placed in the group of spices category with considerable higher prices (the world's third-most expensive spice), there is always a risk of impurity and manipulation for this valuable product. Thus, need to pay special attention to consumer protection against adulteration.

(f) Number of commodities which would need separate standards including whether raw, semi-processed or processed

A single standard for cardamom will cover all forms of cardamom traded worldwide. The different forms of cardamom like whole capsule ,seed ,ground etc.will be examined under this standard individually.

(g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body (dies)

The existing standards which may be considered while developing a Codex standard for cardamom are:

- ISO 882 Cardamom [*Elettaria cardamomum* (Linnaeus) *Maton* var. *minuscula Burkill*] – Specification Part 1: Whole Capsules
- ISO 882-2 Cardamom [*Elettaria cardamomum* (Linnaeus) *Maton* var. *minuscula Burkill*] - Specification Part 2: Seeds

5. Relevance to the Codex strategic objectives

The elaboration of a Codex standard for cardamom is in accordance with the strategic objectives as it will address current and emerging issues in the global trade of spices and culinary herbs by establishing a science-based standard developed with full participation of Codex Member countries throughout the process of development of the standard, and thereby promoting adoption of these standards by Member countries in their national legislation, and facilitating fair practices in food trade and protecting consumer health. Therefore this proposal is consistent with the Strategic Plan 2020-25 of the Codex Alimentarius Commission, in particular outcomes 1.2, 2.2, 3.2, and 4.2.

Goal 2- Promoting Widest and Consistent application of scientific principles and Risk analysis

The proposed work will promote the elaboration of Codex commodity standards based on the rigorous scientific analysis of collected data

This Codex Standard will facilitate fair trade of cardamom, as the quality, purity parameters and food safety. The purity of cardamom allows to provide proper criteria for the quality control of these product.

So, elaborating of this standard can help to avoid the risks such as lack of Good Hygienic Production, non-compliance with grading, adding artificial color. Iin addition, this proposed standard can be a reference for solving food safety issues such as microbial contamination, heavy metals, contaminants, residue pesticides, food additives

6. Information on the relation between the proposal and other existing Codex documents.

This is proposed as a new global standard and has no relation to any other existing Codex text on this item, except that this standard will make reference to relevant standards and related texts developed by General Subject Committees as follows:

- *General Principles of Food Hygiene* (CXC 1-1969)
- *Code of Hygienic Practice for Low Moisture Foods* (CXC 75-2015), *Annex III* Spices and dried culinary herbs
- Maximum limits for pesticides residues adopted by Codex
- *Principles and Guidelines for the Establishment and Application of Microbiological Criteria related to Foods* (CXG 21-1997)
- *General Standard for Contaminants and Toxins in Food and Feed* (CXS 193-1995)
- *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985)
- *Recommended Methods of Analysis and Sampling* (CXS 234-1999)

7. Identification of any need for any requirements for and availability of expert scientific advice

No expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

8. Identification of any need for technical input to the standard from external bodies so that this can be planned for.

The technical inputs from other external bodies such as International Organization for Standardization (ISO), American Spice trade Association (ASTA) and European Spice Association (ESA) shall be welcomed for this work.

9. Proposed Time Schedule

It is expected that the development of this standard would be conducted in three CCSCH sessions or less, depending on the agreement reached by the Committee.

ANNEX II

PROJECT DOCUMENT

PROPOSAL FOR NEW WORK FOR A CODEX STANDARD FOR DRIED AND DEHYDRATED TURMERIC

(CCSCH Group category – Dried roots, Rhizomes and Bulbs)

(For Approval)

1. Purpose and scope of standard

The scope of the work is to establish a worldwide standard for dried and dehydrated whole, split, crushed or ground turmeric (*Curcuma longa* L.) of the family *Zingiberaceae* to facilitate international trade and consumer protection.

The objective of the standard is to consider the essential quality characteristics of dried turmeric for industrial food production and for direct human consumption, including for catering purposes and other essential uses as required, to aid international trade in this product.

2. Relevance and timeliness

India is the largest producer, consumer and exporter of turmeric in the world, and other major producers include Pakistan, China, Haiti, Jamaica, Peru, Taiwan and Thailand.

Due to the growing trend of worldwide dried turmeric production and trade, it is necessary to establish a commodity standard covering the safety, quality, hygiene and labelling in order to have a reference that has been internationally agreed by consensus between the producing, consuming and trading countries across the world. More significantly, the present status of dried or dehydrated turmeric is not limited to any particular region and hence justifies the elaboration of an international standard commensurate with the dried or dehydrated turmeric's true standing as an increasingly valuable worldwide commodity. In addition, the drafting of a Codex standard for dried turmeric will help to protect consumers' health and to promote fair trade in accordance with the international agreements in particular the WTO SPS and TBT Agreements.

Traditionally, dried turmeric is used for culinary purposes as well as in confectionery industry. It is also frequently used to flavour or colour curry powders, mustards, butters, and cheeses.

3. Main aspects to be covered

The standard entails main aspects related to the definition of the produce, essential quality factors e.g moisture and labelling requirements in order to provide certainty to the consumer on the nature and characteristics. The standard will supply high quality and safe products to protect consumer's health and against misleading practices by including all the necessary parameters such as moisture, proper labelling, and other permissible limits among others.

The standard will cover characteristics related to identification and quality in all aspects as well as safety requirements.

- Establish the minimum requirements of dried turmeric which shall be complied with, independently from the quality parameters and other requirements regardless of class.
- Define the categories to classify dried or dehydrated turmeric in accordance with its characteristics.
- Establish the tolerance as regards quality and size that may be permitted of dried or dehydrated turmeric contained in a package.
- Include the provisions to be considered relating to the uniformity of the packaged product and the packaging used.
- Include provisions for the labelling and marking of the product in accordance with the CODEX general standard for the labelling of pre-packaged foods.
- Include provisions for pesticides and contaminants with the reference to the General Standard for Contaminants and toxins in food
- Include provisions for hygiene with the reference to the general principles of food hygiene and other relevant codes of hygiene practices.
- References to Methods of Analysis and Sampling.

4. Assessment against the Criteria for the Establishment of Work Priorities

General Criteria

Codex standard for dried or dehydrated turmeric would be beneficial for developing countries because they are the major producers, exporters and consumers. Establishing a standard for the commodity as a spice is necessary to meet minimum requirements for food quality and safety to ensure consumer protection.

(a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

There are as yet no exact figures available on the global production data of turmeric but these will naturally become available as the project advances. Production data of India for Turmeric is listed below in Table 1.

Table 1: Production data of India for Turmeric

Year	Production (in Tonnes)
2012-13	986690
2013-14	1092630
2014-15	846250
2015-16	967060
2016-17	925270
2017-18	863460
2018-19	959797
2019-20	938955

Source: Directorate of Arecanut and Spices Development (DASD), Kozhikode

Turmeric is one of the spices of the most traded in the world with a total volume of exports from producing countries such as India, Pakistan and China. Detailed statistics of worldwide import and export of Turmeric are given in Table 2 and 3.

Table 2: Worldwide Export of Turmeric

Year	Export Quantity (in Tonnes)	Export Value (in USD thousand)
2013	116496	166470
2014	112810	158298
2015	125237	189366
2016	142608	253942
2017	162058	275016
2018	175817	348625
2019	192527	304000

Source: ITC calculations based on UN COMTRADE and ITC statistics.

Table 3: Worldwide Import of Turmeric		
Year	**Import Quantity (in Tonnes)**	**Import Value (in USD thousand)**
2013	88515	137114
2014	105397	165164
2015	137677	218665
2016	**	246287
2017	150623	265440
2018	**	304660
2019	**	294847

Source: ITC calculations based on UN COMTRADE and ITC statistics.

**- In the source, import volume is mentioned as “No quantity”

The available data is updated as of 2019.

(b) Diversification of national legislations and apparent resultant or potential impediments to international trade

Imports and exports of turmeric take place for many applications. Trade in turmeric as at the moment depends on producing and importing countries mutual agreement in terms of grades and specifications, which lead to having different standards for each country. However, it would be preferred that the trade in turmeric is carried under an international criteria based on Codex Standard. Therefore, the new work would provide internationally recognized specific standards in order to enhance international trade and to accommodate the importer’s requirements.

International organizations ISO already has an existing standards for turmeric. To overcome the resultant or potential impediments to international trade, it is essential to incorporate all existing different standards in a single improved comprehensive standard acceptable across board internationally. This warrants the establishment of a Codex standard as per the Procedural Manual.

(c) International or regional market potential

The import of dried or dehydrated turmeric by most countries is increasing. India, Iran and USA are the largest importers of dried turmeric according to the current statistic of FAOSTAT. India, Indonesia and Myanmar are the major exporters globally according to FAOSTAT.

Table 4, Export of Turmeric from countries in 2019 (Top 15 countries by value)			
Sl No	**Country**	**Exported quantity, Tons**	**Export value, USD (000)**
1.	India	131122	194348
2.	Viet Nam	3566	15608
3.	Myanmar	22594	14472
4.	Netherlands	3146	9752
5.	Indonesia	7163	7765
6.	Ethiopia	6319	5313
7.	United Kingdom	846	4912
8.	Germany	1128	4773
9.	Bangladesh	1824	4679
10.	United States of America	924	4664
11.	Peru	1938	3633
12.	China	1118	3196
13.	Fiji	1285	3068
14.	Spain	676	2641
15.	United Arab Emirates	2089	2574

Source: ITC calculations based on UN COMTRADE and ITC statistics.

Table 5, Import of Turmeric into countries in 2019 (Top 15 countries by value)			
Sl No	**Country**	**Imported quantity, (Tons)**	**Import value, USD (000)**
1.	India	28019	34258
2.	United States of America	9881	33929
3.	Iran, Islamic Republic of	14638	15477
4.	United Kingdom	8910	14887
5.	Bangladesh	15617	14447
6.	Germany	5041	13173
7.	Malaysia	8410	11039
8.	Japan	4668	10360
9.	Netherlands	4411	9316
10.	Morocco	8198	9225
11.	United Arab Emirates	7608	9064
12.	Saudi Arabia	5966	7853
13.	Canada	1395	6745
14.	Sri Lanka	5517	6409
15.	France	2006	6233

Source: ITC calculations based on UN COMTRADE and ITC statistics.

(d) Amenability of commodity to standardization

The characteristics of Dried or dehydrated Turmeric from its cultivation to retail sale e.g. cultivar varieties, composition, quality characteristics, packaging, etc. all lead to adequate parameters for the standardization of the product.

(e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

There is no general standard specifically covering dried or/and dehydrated Turmeric in international trade. The new work will strengthen consumer protection and will facilitate trade in dried or/and dehydrated Turmeric by establishing an internationally agreed and recognized quality standard.

(f) Number of commodities which would need separate standards including whether raw, semi-processed or processed

The proposed standard will cover the different forms of dried and / or dehydrated Turmeric like whole, sliced, crushed and powdered.

(g) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body(ies)

The existing standards which may be considered while developing a Codex standard for dried turmeric are:

- ISO 5562:1983, Turmeric, whole or ground (powdered) - Specification
- ISO 5566:1982, Turmeric - Determination of colouring power - Spectrophotometric method
- European Spice Association quality minima document
- American Spice Trade Association (ASTA)

5. Relevance to the Codex strategic objectives

The elaboration of a Codex standard for dried and dehydrated turmeric is in accordance with the strategic objectives as it will address current and emerging issues in the global trade of spices and culinary herbs by establishing a science-based standard developed with full participation of Codex Member countries throughout the process of development of the standard, and thereby promoting adoption of these standards by Member countries in their national legislation, and facilitating fair practices in food trade and protecting consumer health. Therefore this proposal is consistent with the Strategic Plan 2020-25 of the Codex Alimentarius Commission, in particular outcomes 1.2, 2.2, 3.2, and 4.2.

6. Information on the relation between the proposal and other existing Codex documents.

This proposal is a new Codex standard and is not related to or based on any pre-existing Codex document. This standard will include references to relevant pre - existing Codex texts developed by general subject committees, as follows:

(a) *General Principles of Food Hygiene* (CXC 1-1969)

(b) *Code of Hygienic Practice for Low Moisture Foods (*CXC 75-2015) (Annex III)

(c) *Principles and guidelines for the Establishment and Application of Microbiological Criteria related to Foods* (CXG 21-1997)

(d) Maximum limits for pesticide residues adopted by Codex.

(e) *General Standard for Contaminants and Toxins in Food and Feed* (CXS 193-1995)

(f) *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985)

(g) *Recommended Methods of Analysis and Sampling* (CXS 234-1999)

7. Identification of any need for any requirements for and availability of expert scientific advice

Scientific advice from external global bodies like FAO/WHO; JECFA and others are welcomed, but no expert scientific advice is foreseen at this stage. Published research documents by international bodies will be referred in the process of preparing the standard, if found necessary.

8. Identification of any need for technical input to the standard from external bodies so that this can be planned for

Technical input from the International Organization for Standardization (ISO), American Spice Trade Association (ASTA), and European Spice Association (ESA) while developing this standard may be sought when developing this standard.

9. Proposed timeline for completion of the new work

It is expected that the development of this standard would be conducted in three CCSCH sessions or less, depending on the agreement reached by the Committee.

ANNEX III

PROJECT DOCUMENT

PROPOSAL FOR NEW WORK ON CODEX STANDARD FOR SPICES IN THE FORM OF DRIED FRUITS AND BERRIES

(Allspice, Juniper berry, Star anise, Vanilla)

(For Approval)

1. Purposes and the Scope of the Standard

The purpose of the new work is to develop a group standard for spices derived from the Dried Fruits and Berries. This new approach to standard development will demonstrate the rapid development of standard development that the CCSCH's can build on for broader application within the Committee mandate.

2. Relevance and timeliness:

Spices and culinary herbs are not used for caloric content, but as condiments or ingredients for imparting taste/flavor to food and beverages. They are globally used and are historically an important part of international trade. In many countries SCH are one of the few remaining crops largely produced by small farmers as their main source of income. Therefore, developing a group standard quickens the standard development process to meet the needs of traders and consumers, but also assist in providing markets to producers. To expedite development of this group standard, spices within the group without significant trade data, chemical and physical characteristics are excluded from this proposal. However, when such information becomes available, they can be added at the request of a member.

Due to competitive markets, producers and traders are no longer willing to wait four to six years for the development of a standard. Therefore, to be relevant to the SCH sector, the CCSCH must deliver its standards - scientifically correct and in the shortest possible time. The grouping proposed allow the CCSCH to develop standards for six spices within the dried fruit and berry group at once. This format focusing mainly on the chemical (authenticity - taste/flavor) and physical (safety and quality) characteristics This faster method of development CCSCH standards will not compromise SCH quality and safety because these two characteristics sections will be the principal focal sections of the standard.

3. The main aspects to be covered

The main aspects to be covered in the Proposed Draft group Standard will include:

1. **Scope**

   This Standard applies to spices derived from dried fruits and berries offered for direct consumption, as an ingredient in food processing, or for repackaging if required. It excludes spices intended for industrial processing.

2. **Product Definition**:

   a) The specific names of standardized products will be indicated whereby all six (6) commonly named products are listed in a table with their general, scientific, and subgroup names.
   b) **Styles**: This section will be elaborated in a broad manner that will apply to all products within the group in the predominant styles in trade (whole, cut/broken and ground/powdered). This section can be amended to reflect the style characteristics of a specific product that is different from the three indicated.

3. **Classification:**

   Quality classes (Extra, Class I & Class II) are omitted because (i) they are not internationally accepted, (ii) the premise that Codex Standards should establish the "*absolute minimum requirements"* for international trade and consumer safety and (iii) the growing belief that classification should be left to contractual arrangements between traders

   Sections 3 to 9: These sections include mainly templated (standard format) texts that rarely changes. However, changes may be made if needed to better reflect the product characteristics, trade practices or to enhance food safety.

   Annex on Chemical and Physical Characteristics: This annex includes two tables, one for chemical characteristics and one for physical characteristics. Each table has the common product name listed in the same sequence as in Section 2.1 Product Definition along with the name of individual chemical and physical characteristics that must be checked as the heading of columns. In the same line with the named spice and the different styles, beneath each column heading, the minimum or maximum characteristic value will be entered. A last column titled "Other

factors/comments" will be used to facilitate inclusion of characteristics unique to an individual spice that do not fit within the common column headings.

4. An assessment against the Criteria for the Establishment of Work Priorities

The development of the Group Standard format has been discussed in every CCSCH session. In the last three sessions, it discussed by "In-session Working Group on Priorities" that selects project proposals submitted for the development of standards. Most of the text in the CCSCH standards is consistent across all spices and herbs, (for example, sections including contaminants, food hygiene, weights and measures, food additives and labeling). The group standard will allow the CCSCH to focus on the variables among spices in ensuring consumer food safety and fair practices in the food trade.

Within the Dried Fruits and Berries group, the CCSCH completed two standards for Black, White and Green Peppers (CXS 326-2017) and Cumin (CXS 327-2017). The committee is currently working on the development of a standard for Chili Pepper and Paprika at Step 3. A proposal for the development of a standard for cardamom was placed on the priority list for standardization at CCSCH4.

a) Volume of production and consumption in individual countries and volume and pattern of trade between countries

When compared to the volume of other agricultural products internationally traded, the volume of dried SCH are miniscule, however, SCH are have higher monetary value per kg or lb. or ton. Based on the availability of trade data, the following spices within the fruit and berries group are prioritized at this time (Table 1). Some other spices in this group including ambrette, cambodge, grains of paradise, kokam, dried mango and dried tamarind were not included in the table since they were not globally significantly traded. Production trade and value data for some spices in this group are not readily available due to the practice of placing the so called "minor spices" individual production and trade data under the general "spice" heading including by FAOSTAT and the Harmonized Tariff System (HTS).

	Common Name	Top Producers and Trade pattern between countries	Trade Volume
1	Allspice	$1.94B total (2018) Top Exporters (2018) India: $690M; China: $531M; Spain: $170M; Peru: $80.5M; Mexico: $74.6M Top Importers (2018) United States: $298M; Vietnam: $208M; Thailand: $153M; China: $145M; Spain: $103M	591.5K Metric tons (2019)
2	Juniper berry	$16,996K total exported (2019) $54,000 total imported (2018) Top Exporters (2019) Switzerland: $1,870K; United States: $1,740K; Brazil: $1,634K; Austria: $1,548; United Kingdom: $1,350K Top Importers (2018) India: $23,000; United States: $21,000; Tunisia: $5,000; Egypt: $3,000; Netherlands: $1,000	
3	Star Anise	$281M total (2018) Top Exporters (2018) China: $51.2M; Egypt: $38.1M; India: $36.8M. Vietnam: $29M; Afghanistan: $18.3M Top Importers India: $44.9M; Vietnam: $42.2M; Germany: $27.5M;	

4	Vanilla	United States: $24.3M; United Kingdom: $9.03M $1.02Billion total (2019) Top Exporters Madagascar: $584M; France: $99M; Germany: $69M; Indonesia: $69M; Canada: $65M Top Importers USA: $525M; France: $209M; Germany: $125M Canada: $65M; Japan: $27M; Netherlands: $24M	7575 tons (2018)

Table 1. Trade data for various fruits and berries type of spices. [The spices listed in this table does not comprise all spices in the dried fruit and berries grouping.]

b) Diversification of national legislations and apparent resultant or potential impediments to International trade:

Globally, there exist diverse regulatory requirements and industry trade practices from existing national and international standards and regulations, including the following:

- Agmark India
- European Spice Association (ESA) - Quality Minima Document Rev.5
- International Organization for Standardization (ISO)
- America Spice Trade Association (ASTA) Cleanliness Specifications
- United States Food and Drug Administration (FDA) Defect Action Levels
- Bureau of Standards Jamaica
- United States Department of Agriculture (USDA)
- Bureau of Indian Standards
- Indian Food Safety Standards 2.9.36 Pimento or Allspice
-

c) International or regional market potential:

Table 1 lists certain spices that are significantly traded internationally in terms of market potential, trade values and patterns. These are therefore justified to be included for the development of standards under the 'fruits and berries' grouping scheme. These include four spices, i.e. allspice, juniper berries, star anise and vanilla.

d) Amenability of commodity(ies) to standardization

There is existing information for physical and chemical characteristics for these spices, and discussions with the major exporting and importing countries of these commodities will help in harmonizing the values for some of the parameters as well as provide data for some missing parameters. Some of the listed spices have national food safety standards and some have current ISO standards.

e) Coverage of the main consumer protection and trade issues by existing or proposed general standards

The new work proposal includes significantly traded spices and, consumer protection is expected. The priority commodities for inclusion in the group as indicated in Table 1.

f) Work already undertaken by other international organizations in this field and/or suggested by the relevant international intergovernmental body (dies)

Some of the work already undertaken includes:

ISO 11178:1995 Star anise (Illicium verum Hook. f.) — Specification

5. Relevance to the Codex strategic objectives

This grouping approach aligns with the Codex 2020-2025 strategic goals. As aforementioned, developing group standards will address critical issues in a timely manner. The development of these standards will be based on science and risk-analysis principles. Categorizing the spices based on the plant part used, will not only make the standard functional, efficient and user-friendly but organizing these various spices in a single location will increase the impact and will make the Codex standards more recognizable across the globe.

6. Information on the relation between the proposal and other existing Codex documents as well as other Ongoing Work

This standard would take into account the already adopted Codex Standards on spices, i.e. Black/white/green pepper (BWG) (CXS 326); and Cumin (CXS 327); as well as the ongoing work on dried chili and paprika. The new proposal cardamom will also be taken into account.

7. Identification of Requirement for Availability of Expert Scientific Advice

The expertise required during the development of this standard will be referred to the relevant committees including the Codex Committee on Food Labeling (CCFL), Codex Committee on Methods on Analysis and Sampling (CCMAS), Codex Committee on Food Additives (CCFA), and the joint FAO/WHO programs (JECFA, JEMRA, etc.).

8. Identification of Need for Technical Input to the Standard from External Bodies

No need for technical input from external bodies is anticipated at this point in time.

9. Proposed timeline for completion of work

It is expected that the development of this standard would be conducted in three CCSCH sessions or less, depending on the agreement reached by the Committee.